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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,268

06/13/2006

Toshimi Matsumoto

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EXAMINER

PEZZUTO, HELEN LEE

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

05/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,268	Applicant(s) MATSUMOTO ET AL.	
	Examiner Helen L. Pezzuto	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,8 and 11-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,8 and 11-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's amendment to claims 1-2, 7-8, the cancellation of claims 3-6, 9-10, and the addition of claim 21 filed in the response on 2/8/08 is acknowledged. Furthermore, applicant's amendment to paragraphs [0022]-[0025] in the specification is acknowledged. Currently, claims 12, 7-8, and 11-21 are pending in this application. In light of applicant's amendment, previous objection to the specification and 112 rejections to claims 1-2, and 8 is withdrawn.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 7-8, and 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht et al. (US-425 or US-517) or WO 01/58579 A1 in view of Yamashita et al. (US-944) or Yaguchi et al. (US-220) for the reasons of record.

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US 5,798,425 to Albrecht et al. discloses a copolymer suitably used as a cement additive, comprising 10-90 mol% of an unsaturated dicarboxylic acid units Ia or Ib, 1-89 mol% of an oxyalkylene glycol alkenyl ether unit of formula II, and 0.1 to 10 mol% a third component defined by formula IIIa or IIIb (col. 2, line 33 to col. 5, line 29; col. 6, lines 35-49). Specifically, prior art unsaturated dicarboxylic acid derivative Ia and Ib fall within the scope of the instant formula B, the oxyalkylene glycol alkenyl ether embraces the instant formula A, and prior art third recurring unit encompasses the instant formula C when S=hydrogen and T=COOR⁵. Prior art third recurring unit also embraces the further comonomer expressed in claim 17 (i.e. a diester of an unsaturated dicarboxylic acid). Patentees further discloses the inclusion of up to 50 mol% of unsaturated acrylic or methacrylic acid derivatives such as methyl methacrylate and hydroxyethyl methacrylate, further encompassing the instant formula C (col. 5, lines 30-42; col. 8, lines 53-62).

Similarly, US 6,777,517 B1 to Albrecht et al. discloses a copolymer comprising 51-95 mol% of unsaturated monocarboxylic or diacrboxylic acid derivatives represented by formulas Ia, Ib, or Ic, 1-48.9 mol% of an oxyalkylene

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glycol ether as set forth in formula II, and 0.1 to 5 mol% of structural units of the formula IIIa or IIIb, 0-47.9 mol% of recurring units of formula IVa and IVb, defined within the instant formula B, A, C, and B, respectively (col. 2, line 38 to col. 7, line 42; col. 7, line 58 to col. 8, line 37). Patentees further suggest adding up to 50 mol% of vinyl or unsaturated (meth)acrylic derivatives such as methyl methacrylate, (meth)acrylamide, methyl acrylate, butyl acrylate (col. 7, lines 43-53).

WO 01/58579 A1 discloses a dispersant composition comprising a polymer derived from polyalkylene oxide group, anionic and cationic groups-containing recurring units. Specifically, prior art teaches a polyalkylene oxide group-containing unit defined by formula (I), an anionic monomer including those having carboxyl groups (i.e. carboxylic acid/anhydride monomers) which fall within the scope of the instant formula A and B, respectively (page 6-8, 11-13, 16-17, 27-28). Prior art reference further suggest adding monomer (F), including (meth)acrylic acid alkyl and hydroxyl ester (F1) and (F2), and (meth)acid amides (F3), defined within the scope of the instant formula C (page 19).

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Prior art references discussed above specifically teach polymeric cement additives having enhanced properties, comprising the presently claimed recurring units A, B, and C in the recited proportions. Accordingly, it would have been obvious to one having ordinary skill in the art to formulate the copolymer additive as taught, motivated by the reasonable expectation of success. Regarding the cement additives species expressed in claims 8, 12, and 14-16, the examiner is of the position that these are conventionally included in cement compositions, as taught in closely analogous US 6,911,494 B2 (col. 24, line 51 to col. 26, line 40) and US 6,762,220 B1 to Yaguchi et al. (col. 4, lines 41-50). Accordingly, one having ordinary skill in the art would have readily envisaged their inclusion, in light of their having been disclosed as suitable cement additives for property enhancement as taught. Once the motivation for their inclusion is provided, discovering the optimum or workable ranges involves only routine skill in the art. Thus, rendering obvious the instant claims.

Response to Arguments

Applicant's amendment and remarks filed on 2/8/08 have been fully considered but are not found persuasive.

Firstly, applicant urges that none of the cited documents suggest copolymers with the recited proportions of A, B, and C. The examiner disagrees. US-425 of Albrecht et al. teaches 10-90 mol% of the instant B, 1-89 mol% of the instant A and up to 50 mol% of the instant C, which clearly encompass the range of mole ratios expressed in the present claims. Absent showing of criticality and unexpected results demonstrated for the claimed ratios within those of prior art, no patentability is seen. Secondly, applicant urges that WO 01/58579 A1 does not disclose unit A or its incorporation into the copolymer. Counsel is cordially directed to page 17, lines 4-6, wherein polyalkylene oxide monoallyl ethers were taught to be suitable as monomer (C). Accordingly, the examiner's position is maintained.

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened

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statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helen L. Pezzuto/
Primary Examiner
Art Unit 1796

hlp

Application Number 	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/551,268	MATSUMOTO ET AL.	
	Examiner	Art Unit	
	Helen L. Pezzuto	1796	